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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,773

10/24/2003

John Chen

15436.247.8.1

1968

22913 7590 07/12/2007

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(F/K/A WORKMAN NYDEGGER & SEELEY)  
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EXAMINER

AKANBI, ISIAKA O

ART UNIT

PAPER NUMBER

2886

MAIL DATE

DELIVERY MODE

07/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/693,773

Applicant(s)

CHEN ET AL.

Examiner

Isiaka O. Akanbi

Art Unit

2886

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Amendment*

The amendment filed on 01 May 2007 has been entered into this application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-13, 15, 18-20 and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,666,450) in view of Genco et al. (H315).

Regarding to claims 1, 3, 12-13 and 18-20, Fujimura teaches of an apparatus/method for measuring a concentricity of optical components in an optical assembly comprising a header (3/110) with a photonic device mounted thereon, said photonic device having a first optical axis (laser axis), said optical assembly further comprising a cap (5/85/115) having a lens (6/114) therein, said lens having a second optical axis (lens axis), a chuck (7)(i.e. a device for centering and clamping work in a lathe or other machine tool (dictionary.com)) configured to support lead pins (4/81/82) of said optical assembly, said chuck being adapted to support said optical assembly without obstructing a view of at least a portion of said lens (6)(figs. 1 and 2)(figs. 15-18) and a camera (col. 8, line 55-65).

Fujimura is silent regarding a visual display system.

However, the use of visual display system (i.e. screen/graph) adapted to depict a position/coordinate (i.e. x and y coordinate) is known in the art, as evidenced by Genco (24)(fig. 1)(col. 2, line 48-61).

It would have been obvious to one having ordinary skill in the art at the time of invention to provide a visual display (screen/graph) system adapted to depict a position (i.e. x and y coordinate) of said lens relative to said photonic device and to measure said position for the purpose of providing easy view of the alignment since all the components of the visual display system is commercially available. Further Genco teaches visual display system comprising at least one video display (24)(fig.1).

As to claim 2, Fujimura further discloses measurement is used to determine said concentricity (maximum power) between said first optical axis (laser/lens axis) and said second optical axis (laser/lens axis)(figs. 1 and 2)(See abstract)(col. 2, line 33-42).

As to claims 7 and 24, Fujimura also discloses wherein said lens is a ball lens (6) and said photonic device is a laser (16).

As to claims 8-9 and 25-26, Fujimura further discloses wherein said first optical axis is collinear with a beam emitted from said laser (16) and said second optical axis passes through a center of said ball lens (figs. 1 and 2)(col. 2, line 33-42).

As to claim 15, Fujimura also discloses wherein said component is a laser having a first axis and said base is a header having a second axis parallel to said first axis, and wherein the step for measuring measures the distance between said first axis and said second axis (figs. 16 and 17)(col. 17, line 40-col. 18, line 1-56)(col. 7, line 56-67).

As to claims 10-11 and 27-28, Fujimura further discloses in another embodiment (fig. 10) wherein said optical assembly is held in an arm (96) and said visual display system is movable

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relative to said arm and said optical assembly is held in an arm and said arm is movable relative to said visual display system (col. 14, line 11-38).

As to claims 29-30, Fujimura discloses a passive method for measuring a concentricity of optical components in an optical assembly (fig. 16)(See abstract)(col. 1, line 14-16).

Claims 4, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,963,696) in view of Genco et al. (H315) and further in view of the examiner Official Notice.

As to claims 4, 14 and 21, the reference of Fujimura and Genco teaches of an optical assembly comprising camera (CCD), as applied to claims above, however the reference of Fujimura and Genco is silent with regard to said camera further comprising a zoom lens. The examiner wishes to take Official Notice of the fact that the use of a camera with zoom lens would have been well known as evident by Mazumder et al. (5,446,549). It would have been obvious to one having ordinary skill in the art at the time of invention to provide a camera comprising a zoom lens for the purpose of zoom in or out camera to obtain a better image of the alignment.

Claims 5-6, 16-17 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,963,696) in view of Genco et al. (H315), and further in view of Staver et al. (5,621,831)

As to claims 5, 16 and 22, Fujimura when modify by Genco is silent regarding the limitation wherein said visual display system includes a video overlay including at least one calibration feature that allows said concentricity to be measured.

However Staver teaches of visual display system that includes a video overlay including at least one calibration feature that allows said concentricity to be measured (fig. 3)(col. 5, line 4-30). Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to provide visual display system includes a video overlay including at least one calibration feature that allows said concentricity to be measured for the purpose of aiding a person to align accurately.

As to claims 6, 17 and 23, Fujimura, as modified by Genco and Staver disclose the claimed invention, as applied to claim 5, 16 and 22 above, except for is silent regarding calibration feature that allows said concentricity to be measured to within 1 micron, however it would have been obvious to one having ordinary skill in the art at the time of invention to design a calibration feature that would allows said concentricity to be measured to within certain micron/degree (i.e. 1 micron) for the purpose of providing/discovering the optimum or workable ranges for a more accurate measurement. (see In re Aller, 105 USPQ 233).

#### **Additional Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed in the attached form PTO-892 teaches of other prior art apparatus/method for measuring a concentricity of optical components in an optical assembly that may anticipate or obviate the claims of the applicant's invention.

#### ***Response to Arguments***

Applicant's arguments/remarks, (see pages 3-7), filed on 01 May 2007, with respect to the rejection(s) of claim(s) 1-30 under 35 U.S.C. 103(a) have been fully considered but are not persuasive.

In response to Applicant's request that the Examiner specifically point to the portions of Fujimura that teach chuck (as defined by dictionary.com is(i.e. a device for centering and clamping work in a lathe or other machine tool or a device for holding a drill bit), it is respectfully pointed out to applicant that Fujimura clearly shows (7/8/110/119) in ((figs. 1-2 and 15-18) that met these limitations.

Further, as to applicant arguments that there is no suggestion to combine the references Fujimura and Genco, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine would have been at least obvious to one having ordinary skill in the art at the time of the invention was made to modify Fujimura by Genco to provide a visual display (screen/graph) system adapted to depict a position (i.e. x and y coordinate) of said lens relative to said photonic device and to measure said position for the purpose of providing easy view of the alignment since all the components of the visual display system is commercially available. Further, the use of visual display system (i.e. screen/graph) adapted to depict a position/coordinate (i.e. x and y coordinate) is a conventionally known in the art, as evidenced by Genco.

Finally, since the applicant has not argued the examiner's position about the "official Notice" in the previous Official actions. The applicant has acquiesced. Therefore the claims are still rejected as shown in the detail above.

**Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur R. Chowdhury can be reached on (571) 272-2287. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi

July 6, 2007

  
TARIFUR CHOWDHURY  
SUPERVISORY PATENT EXAMINER